

## **Menstrual Hygiene among Adolescent Girls in a Rural Area – myth or reality**

Gagandeep Kaur<sup>1</sup>, Asif Khan<sup>2</sup>, Sadaf Bashir<sup>3</sup>,

**1= ,Post Graduate, Dept of community Medicine , HIMS,  
Dehradun**

**2 = Associate Professor, Dept of community Medicine, AIMS BG  
Nagara**

**3 = Post Graduate, Dept of Pathology, AIMS BG Nagara**

## **ABSTRACT**

**Research question:** What are practices among adolescent girls during menstruation?

**Objectives:** 1) To know the knowledge regarding menstrual hygiene in teenage girls. 2) To determine practices associated with menstruation. Setting: two villages randomly selected in the field practice area of AIMS, BG Nagara

**Study design:** Cross-sectional study

**Participants:** Girls in the adolescent age group.

**Sample size:** 100

**Methodology:** The study was conducted among 100 adolescent girls of rural area with the help of a pre-designed and pre-tested questionnaire. Data was analyzed statistically by percentages and proportions.

**Study variable:** Socio-economic status, Personal hygiene during menstruation, source of information regarding menarche.

**Statistical analysis:** Percentages, Chi-Square test.

**Results:** Out of 100 respondents, 67% subjects did not know the source of bleeding, 69% girls had knowledge about menopause, 15% of girls are not allowed to do household work,

**Keywords:** *Adolescent girl menstrual hygiene, sanitary pad.*

## INTRODUCTION

The World Health Organization defines adolescence as young people between the ages of 10 and 19 years. <sup>(1)</sup> Adolescence is a vulnerable phase wherein the children are in a transition phase of childhood to adulthood. During adolescence, adolescent girls face challenging situations. One such situation confronted by girls is menstruation. In the past, menstruation was considered to be an unclean phenomenon. The menstruating female was forbidden to do various household chores, and also she would not know the importance of hygiene. In this technological era also, the outlook does not seem to have changed. Hence, the present study was undertaken to assess the awareness regarding menstrual hygiene in adolescent girls and to determine practices associated with menstruation.

## MATERIAL AND METHODS

**Type of study:** Community-based cross-sectional observational study.

**Place of study:** The present study was undertaken among the adolescent girls in Bellur PHC area, which constituted the field practice area of Dept of Community Medicine, AIMS, and BG Nagara

**Duration of study:** 4 weeks: In Mar 2009.

**Study population:** The girls were selected according to the WHO criteria for adolescence that is 10-19 yrs. <sup>(1)</sup>

Sample size = 100

Taking 50% as awareness level, using the formula  $z = 4pq/l^2$ , where  $p = 50$ ,  $q = 100 - p = 50$ ,  $l = 20\%$  of  $p = 10$ .

Two villages were randomly selected. In these selected villages, all the adolescent girls who had attained menarche and who were found in their houses were interviewed. A total number of One hundred girls were chosen in these two villages randomly selected so.

**Study tool:** A pre-designed, pre-tested questionnaire.

**Inclusion criteria:** All adolescent girls who had attained menarche.

**Exclusion criteria:** Adolescent girls not willing to take part in the study.

**Statistical software used:** MS excel and Epi- info

### **Methodology**

Two villages were selected randomly in Bellur PHC area. After taking oral, informed consent, all adolescent girls in these Two villages were interviewed using pre-designed, pre-tested and structured questionnaire. The interview included topics related to awareness about menstruation, source of information regarding menstruation and hygienic practices during menstruation. To assess socioeconomic status, modified BG Prasad Classification was used.

**Statistical analysis:** Data obtained was tabulated and analyzed statistically by percentages, simple proportions and chi square test.

## **RESULTS**

### **Socio demographic profile [Table 1(a)]**

**Table 1(a) Socio demographic variables**

Criteria	Number	Percentage
N=100		
Age		
13 – 15	20	20
15 – 17	17	17
17-19	63	63
Socio economic status (according to modified BG Prasad classification)		
Class I	0	--
Class II	0	--
Class III	4	4
Class IV	20	20
Class V	76	76
Education		

Illiterate	15	15
Literate	85	85
Marital status		
Married	22	22
Unmarried	78	78
Religion		
Hindu	87	87
Muslim	13	13
Attendance at school during menstruation		
No	9	9
Not on first day	3	3
Yes	89	89

In our study, majority of the respondents were in the age group 17 to 19 years of age. 22% of girls were married, of which majority were above 17 years. 76% belonged to lower class, 20% to lower middle class and 4% to upper middle class. 85% girls were literates. 78% of the girls were unmarried and 22% were married. 87% of the girls interviewed were Hindus and 13% were Muslims.

***During Menstruation [Table 1(b)]***

89% girls attended school during menstruation and 9% girls did not attend and only 3% did not attend school on first day of menstruation. 2.51% girls were not allowed to attend school by their parents as they felt that their children were impure and should not attend to school or any other public place and 1.5% girls did not attend school because they had the sense of guilt/shame.

Also 57% girls did not experience dysmenorrhoea, whereas 43% girls had dysmenorrhoea during menstruation.

***Knowledge of Menstruation and menopause [Table 1(b)]***

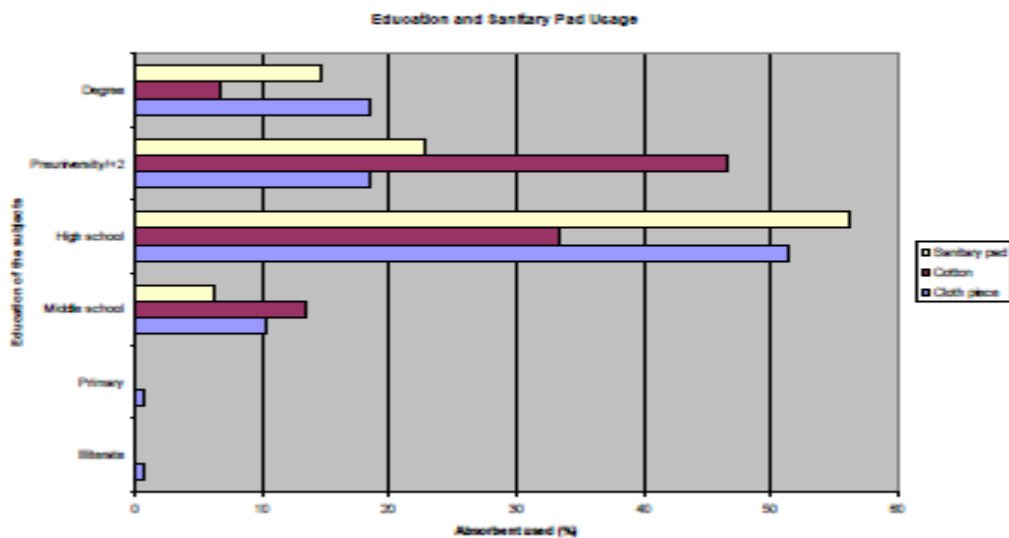
Knowledge about origin of bleeding	Number	Percentage
Does not know	67	67
Uterus	33	33
Knowledge about the cause of bleeding		
Do not know	73	73
Physiological process	27	27
Pain during menstruation		
No	57	57
Yes	43	43
Knowledge of menopause		
Does not stop.	18	18
Does not know	13	13
Yes, at 45-50yrs of age	69	69
Is she allowed to do house hold work		
No	15	15
Not on first day	2	2
Yes	83	83
Absorbent used		
Cloth piece	76	76
Cotton	17	17
Pads	7	7

67% girls did not know the source of bleeding. 73% girls did not know the cause of bleeding, 69% girls had correct knowledge about menopause and 13% did not have any information about menopause.

### ***Practices during menstruation [Table 1(b), Figure 1]***

15% of adolescents were not allowed to do household work. 76% of girls used cloth piece as compared to 7% who used sanitary pads. 72% of unmarried adolescents used cloth piece as compared to 28% married adolescents [ $\chi^2 = 3.61$ ,  $p = 0.164$ ].

**Figure 1 Education and sanitary pad usage**



### ***Source of information***

The most common source of information and knowledge of menarche before menarche were friends-11.55% followed by the mother - 9.54% and teacher - 7.53%.

## **DISCUSSION**

### ***During Menstruation***

Parents have understood that menstruation is physiological and hence are allowing their children who are undergoing menstruation to attend the school as is evident in our study wherein majority (89%) girls attended school during menstruation. Also it was found that 57% girls did not have dysmenorrhoea,

whereas 43% girls reported dysmenorrhoea, which is slightly lesser than that found by Nair et al who reported dysmenorrhoea in 63.75% girls. <sup>(2)</sup> Agrawal S et al reported dysmenorrhoea in 84% of respondents. <sup>(3)</sup>

### ***Knowledge of Menstruation and menopause***

In rural areas, due to a low level of literacy, knowledge regarding any significant event is transmitted mainly through family members. In this study, the knowledge about the source and the cause of bleeding was found to be poor as 67% girls did not know the source of bleeding and 73% girls did not know the cause of bleeding. Das Gupta et al reported 97.5% of study subjects did not know the source of bleeding whereas 86.25% girls knew the cause of bleeding. <sup>(4)</sup> Since menstruation is a physiological process, knowledge should be imparted in rural areas mainly through schools and anganawadis. The parents and teachers should be involved in disseminating of knowledge.

### ***Practices during menstruation***

In our study, 15% of adolescents were not allowed to do household work. This is in contrast to Das Gupta et al, <sup>(4)</sup> who found that 33.82% of girls were not allowed to do household work and Nair et al reported 70%. <sup>(2)</sup> Also, our study showed that 76% of girls used cloth piece as compared to 7% who used sanitary pads. This is almost similar to the study in an urban area by Halder et al in which 61.54% of girls used cloth piece as compared to 28.21% who used sanitary pads. <sup>(5)</sup> Also Baridalyne et al reported similar findings [60%] in an urban resettlement area. <sup>(6)</sup> This assumes significance as our study was conducted in a rural area and the practices observed in our study are very much similar to that of urban areas. The use of pads is low (7%) and might be because of poverty and lack of availability in rural areas. The use of cloth over sanitary pad might mainly be due to either poor affordability or to lack of knowledge. Pad usage has been reported as low in rural areas by Deo et al. <sup>(7)</sup> Also In our study it was found that sanitary pad usage was the highest among Hindus (23.11%), 72.05% of unmarried adolescents used cloth piece as



compared to 28% married adolescents. This might be because of the parental influence or may be because of low level of knowledge regarding hygiene. It was also observed that as age of the respondents increased, sanitary pad usage also increased. ( $p>0.5$ , Not significant)

### ***Source of information***

The most common sources of information about knowledge of menarche before menarche were friends-11% followed by the mother-9.54% and teacher - 7.53%. Singh AJ in his study found similar findings that friends (72%) were the main source of information. <sup>(8)</sup> Mother was the main source of information in studies conducted by SP Singh et al <sup>(9)</sup> and by Das Gupta <sup>(4)</sup> both reporting 64.9% and 67.5%. Deo et al reported teacher - 27.01% as the main source of information in rural area. <sup>(10)</sup> Our study showed a low level of information from the teacher. This might be mainly due to variety of reasons like school dropout after the girl reaches menarche, the subject being considered as taboo in various societies. Friends have been the main source of information in our study mostly because, a girl feels shy to ask her elders about menstruation which is still considered a subject not to be discussed openly in many societies. This explains the fact that among the study subjects, mother and teacher are the sources of information in just under 10% and under 8% respectively. In schools, menstruation and its hygiene related aspects can be made a part of curriculum. And if it is already in the curriculum, then it should be stressed that the teachers inform girls of the various aspects of menstrual hygiene.

### **SUMMARY AND CONCLUSIONS**

67% subjects did not know the source of bleeding

73% girls did not know the cause of bleeding.

13% did not have any information about menopause.

15% of adolescents were not allowed to do household work.

76% of girls used cloth piece as compared to 7% who used sanitary pads.

72.05% of unmarried adolescents used cloth piece.

## ACKNOWLEDGEMENTS

We are thankful to Mr. Yathish, Medico social worker, and Dr Ganesh, interns, for their support in data collection and constant encouragement.

Conflict of interest: Nil

Funding: Nil

## REFERENCES

1. [www.who.int/health](http://www.who.int/health) topics/adolescent health. Last accessed 7th March 2009
2. Nair P, Grover VL and Kannan AT. Awareness and practices of menstruation and pubertal changes amongst unmarried female adolescents in a rural area of East Delhi [letter], Indian Journal of Community Medicine. 2007 Apr-Jun; 32(2): 156-7.
3. Agrawal S, Fatma A and Singh CM. Study of Knowledge and Attitude of Adolescent Girls towards Reproductive Health and Related Problems, Indian Journal of Preventive and Social Medicine. 2007 Jan-Jun; 38(1& 2): 36-41
4. Das Gupta A and Sarkar M, Menstrual Hygiene: How hygienic is the adolescent girl Indian Journal of Community Medicine Volume-33 Issue-2 April 2008, 77-80.
5. Halder A, Ram R, Chatterjee T, Misra R and Joardar GK. Study of need of awareness generation regarding a component of reproductive and child health programme, Indian Journal of Community Medicine. 2004 Apr-Jun; 29(2): 96-98.
6. Baridalyne N and Reddaiah VP. Menstruation: knowledge, beliefs and practices of women in the reproductive age group residing in an urban resettlement colony of Delhi, Health and Population. 2004 Jan- Mar; 27(1):9- 6.
7. D.S. Deo and C.H. Ghattargi. Perceptions and Practices Regarding Menstruation: A Comparative Study in Urban and Rural Adolescent Girls. Indian Journal of Community Medicine Vol. 30, No. 1, January- March, 2005, 33-5

8. Singh A.J. Place Of Menstruation in the Reproductive Life of Women of Rural North India, Indian Journal of Community Medicine Volume-31, No-1 2006 Jan - March.
9. Singh SP, Maya Singh, Meenakshi Arora and Sen P. Knowledge Assessment Regarding Puberty& Menstruation Among Adolescent Girls, Indian Journal Of Community Medicine, Volume-37, 2006.
10. Deo DS and Ghattargi CH Menstrual Problems in Adolescent School Girls: A Comparative Study in Urban and Rural Area, Indian Journal of Preventive and Social Medicine. 2007 Jan-Jun; 38(1 & 2): 64-8.